



IT Service Management PV203



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IBM Services



ITSM future directions



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ITSM Services

Agenda

- Exam info
- ITSM trends
- Cognitive and ITSM
- SIAM
- ITIL vs. Agile

EXAM

Exam dates :

- May 29th
- June 5th
- June 29th
- All dates at 4pm

Test containing

- a) 15 questions with unique answer options (only 1 is correct)
- b) 5 questions with more than one correct answers possibilities (tick-off boxes)
- c) 3 questions with free form answers

Questions	Value	Subtotal	Weight
15	1	15	25%
5	2	10	25%
3	3	9	50%

Duration - Up to 120'

How the exam will be evaluated?

F	<50.9%	not passed
E	51% - 63%	Passed
D	63.1 - 70%	
C	70.1 - 80%	
B	80.1 - 90%	
A	90.1 - 100%	



Don't forget :

When I started my IT Service Management career, ITIL version 2 was king and we didn't really question 'how' we did service management. The companies I was working with were busy trying to get change management in place, improve their Service Desk functionality and decide how much Configuration management they really needed.

The arrival of ITIL version 3 felt at the time like a huge disruption. Service management people started to look outside of operations, and to understand how true service management operates across the entire service lifecycle.

Fast-forward a few years, and ITIL version 3 looks like a minor event compared to the current state of IT service management (ITSM). DevOps, Agile, Lean, SIAM, IT4IT – there's so many new things bursting onto the scene.

The Top hottest ITSM trends for 2018 and beyond



What business users (will) need/expect of IT

- They don't care about any of the stuff on the slides
- They need better, cheaper, faster (sometimes different)
- Why can't my IT organization work like Uber? Box, Salesforce, AWS, Apple?



"Ok, how about this motto: 'If you are unhappy for any reason, we will feel really bad'."

LOB – Line of Business

**Major change
influencer
-
Cloud technologies
adoption**



CLOUD

What's driving the move to Cloud computing?

- Greater than 70% of businesses are considering or using private clouds ⁽¹⁾
- Business drivers – speed, flexibility and economics
 - Business is adopting cloud 5x faster than IT operations ⁽²⁾
- IT challenges – sprawl, control and integration
 - 70% of IT resources is captive in maintenance and operations ⁽³⁾

(1) IDC, datacenter ad]nd Cloud Computing Survey
(2) "You are not ready for Internal Cloud", Forrester
(3) Information Week Analytics survey



Why an IT “Amazon-like” experience WINS

Traditional Service Model

- Inflexible and slow
- Too many manual processes
- Inconsistent User Experience
- Wasted OPEX in overhead
- Multiple portals
- Data disaggregated
- Assets not always recovered
- Software Licenses underutilized
- Low customer satisfactions



- **IT Perceived as a “NO” organization**

Services Led Model

- Consumers self service
- Lower OPEX
- Increased competitive edge
- Enable new revenue streams
- Slows “shadow” IT initiatives
- Reduce CapEx
- Consistent and accurate view of deployed assets
- Automatic recovery of unused or expired assets
- Accurate record of assets for audit

INNOVATION transforms IT to a Business Asset

OPEX – Operating Expenses

CapEX – Capital Expenses

Software-as a Service (SaaS)

is a model of software deployment whereby an application is licensed for use as a service provided to customers on demand.

Platform as a Service (PaaS)

is the set of well defined APIs that a cloud provider offers developers to implement applications in the cloud provider's environment. PaaS also refers to the provisioning of a development and testing environment via cloud for a group of developers.

Infrastructure as a Service (IaaS)

is the delivery of computer infrastructure (CPU, storage, backup and network) as a service.





Monitoring as a Service (MaaS)**Business Process as a Service (BPaaS)****Analytics as a Service (AaaS)****Backup as a Service (BaaS)**

ITaaS = IT-as-a-Service

IT as a Service (ITaaS) is a technology-delivery method that treats [IT](#) (information technology) as a commodity, providing an enterprise with exactly the amount of [hardware](#), [software](#), and [support](#) that it needs for an agreed-on monthly fee. In this context, IT encompasses all of the technologies for creating, storing, exchanging, and using business data.

IT as a service (ITaaS) is an operational model where the [information technology](#) (IT) service provider delivers an [information technology](#) service to a business. *(Wikipedia)*

Four dimensions of ITaaS

<p>Service </p> <ul style="list-style-type: none">• Self-serve catalog of IT services aligned to business needs• Value-based choices: tiered offerings and service levels• Outcome-based performance measures focused on business goals	<p>Financial </p> <ul style="list-style-type: none">• Pricing transparency• Payments based on usage• Levers to influence consumption; service options and levels• IT services bill for business units
<p>Organizational </p> <ul style="list-style-type: none">• Focus on optimizing IT services for business consumption and outcomes• IT responsibility for service performance and profit	<p>Technological </p> <ul style="list-style-type: none">• Open standards-based environment• Highly automated processes• Continuous improvement through analytics and cognitive technologies• Software-defined environment

Service Strategy in the Cloud

- Portfolio management, Demand management, and Financial management:
 - Portfolio management describes the cloud candidate
 - Demand management for workload calculation
 - Financial management for costs calculation to meet workload demand
- Not done or done inaccurately: inefficient service delivery, and/or ineffective charging algorithm
- Service strategy is critical for cloud computing

Service Design in the Cloud

- Services are designed based on what will best deliver on Service Strategy
- Services in the Cloud are:
 - Delivered remotely
 - It is critical to be specified and designing accurately
 - Errors can negatively impact cost and difficult to correct
 - Focus is typically on service level contracts
- SLAs are required:
 - Service deliverables are understood by all parties
 - Expectations are set
- Suppliers have to be identified and selected
- In practice, external cloud supplier may be directed to meet the SLA targets but IT is accountable for failed or poor SLAs
- Availability and capacity to ensure services described in the portfolio and specified in the SLAs can be delivered by cloud computing suppliers
- IT service continuity management and information security management must be in place before the service goes "live"

If not done or done inaccurately can have serious impact on cloud effectiveness.

Service Transition in the Cloud

- Service transition encompasses more than just change management
- Cloud computing needs to find synergy between existing in-house technologies and cloud technologies fuse through change management within Service Transition
- Governance issues may need to be dealt with concerning who owns change mgt:
 - Internal IT or the cloud suppliers
 - who will own and manage changes in the future
 - Change ownership and relationships are vital to establish before transition into production status
- Release and deployment management is required as Service is rolled out to ensure it is successful and well managed
 - Managing in-house and cloud technologies release versions of software and the updating of remote technologies
- Underpinning service transition are service asset and configuration management, which will detail exactly who owns the responsibility for the devices and software required to provide the new service, as well as the configuration management system where those assets reside.
- Service transition is the last-chance saloon because errors here can be extremely difficult and expensive to resolve once in production

Service Operation in the Cloud

- Service Operation requires service monitoring
 - Ensures the delivery of defined and agreed to service levels specified in SLAs
- Role/ownership of Service Operation processes or support points must be clearly defined and monitored
 - Service desks may share primary focus from incident resolution and rapid response to root causes analysis and Problem Management
 - Use of workarounds could impact long term benefits of cloud
- Access management is critical to maintain security and satisfy any customer trust requirements
- External cloud consumers may need access to cloud data collected by the supplier

Continuous Service Improvement in the Cloud

- Cloud Computing Requires CSI for Agility, Adaptability in Responding Quickly and Effectively to Changes in Business Conditions:
 - CSF's, KPI's and CSI Required to ensure Business/IT alignment, Cost Effectiveness and Effective Service Provisioning
 - Service Catalog, Demand Mgt, SLA's/OLA's, etc.
 - Improvement Model and 7 Step Improvement Process are Required
 - Identifying, Qualifying, Quantifying and Reporting on Service Success Factors is Mandatory for Both the Customer and the Service Provider
- Continuous Service Improvement Ensures the Focus Stays on Services, Business/IT Alignment and Measurement in a Cloud Remote Paradigm
 - "If you can't measure it, you can't manage it" is a critical criteria



CSF – Critical Success Factor, KPI – Key Performance Indicator

SLA – Service Level Agreement, OLA – Operation Level Agreement

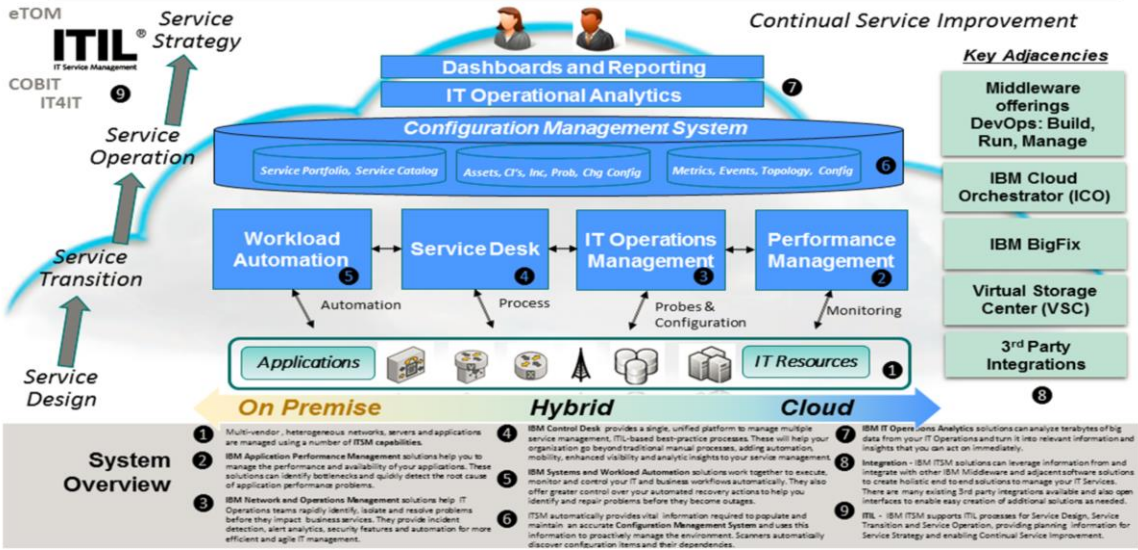
In Summary...Cloud Changes Everything!



ITSM Reference Architecture

In today's complex environments clients are challenged with the need to maximize existing on-premises assets while utilizing the Cloud for speed and innovation. With IBM IT Service Management clients can build, run, and manage applications, IT, and assets running either on-premises, in the cloud, or across both (hybrid). Collaboration is enabled across Development and Operations to automate business and IT processes, to achieve performance insights with analytics and to optimize inventory.

ITSM solutions help IT Operations teams to effectively manage increasingly complex, hybrid environments and accelerate Cloud services delivery. These solutions deliver advanced automation, performance management and orchestration capabilities. IBM has provided thought leadership to improve the state of the art in IT Service Management for the past 30 years and continues to do so, whilst effectively delivering solutions and successfully managing client environments.



IT Management moving to *aaS too

Online Backup/Recovery

30 Vendors, 18% share of total 2014 I-SaaS revenue. 2014-2019 CAGR 21%

Cloud Archiving

15 Vendors, 18% share of total 2014 I-SaaS revenue. 2014-2019 CAGR 20%

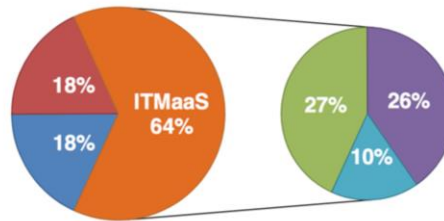
IT Management as a Service

ITSM: 18 Vendors, 26% share of total 2014 I-SaaS revenue. 2014-2019 CAGR 34%.

SNMM: 75 Vendors, 27% share of total 2014 I-SaaS revenue. 2014-2019 CAGR 26%.

RUCPB: 29 Vendors, 10% share of total 2014 I-SaaS revenue. 2014-2019 CAGR 24%.

INFRASTRUCTURE SAAS REVENUE
BREAKDOWN BY SUBSECTOR



- Online Backup/Recovery
- Cloud Archiving
- ITMaaS: Systems and Network Monitoring & Management
- ITMaaS: IT Service Management
- ITMaaS: Resource Utilization, Capacity Planning & Billing

Four critical capabilities for today's successful service management:

- **Make sure your Service Management is right-sized for the organization**
- **Organizational change is critical**
- **Use the right tools to automate ITSM**
- **Don't treat ITSM as having a beginning and end, but a rolling roadmap**

Cognitive ITSM



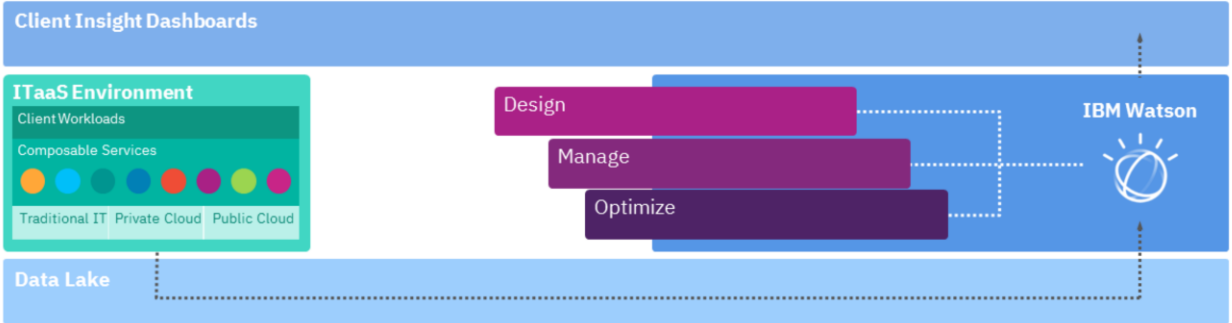
Partnering humans with a cognitive 'brain' and automation on an integrated platform enables you to accelerate innovation and deliver unmatched performance by:

Augmenting human intelligence with cognitive insights to enable practitioners to make data-driven decisions.

Autonomously managing your IT operations to deliver higher service quality through error reduction and faster incident resolution.
Autonomously governing your IT to continuously optimize IT usage and cost.



IBM Services Platform with Watson



Build an agile ITaaS environment to meet ever-changing business needs by:

- Establishing a catalog of composable, compatible services** to rapidly leverage offerings—from both IBM and ecosystem partners—that take full advantage of common functionality
- Seamlessly integrating the right mix of services, at scale** to deliver on your business outcome requirements
- Establishing end-to-end governance** to reduce waste and sprawl across all of your assets

And ensure your environment is always on, always secure, always improving by focusing Watson on three main objectives:

- Designing superior IT solutions** to more rapidly and effectively deliver on business objectives
- Managing IT operations** to keep the environment healthy and always-on
- Optimizing IT performance** to continuously improve business outcomes

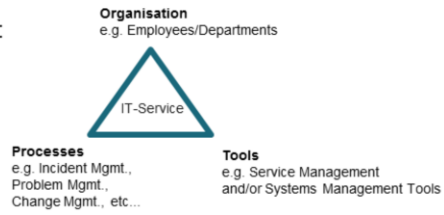
Service Integration and Management

SIAM

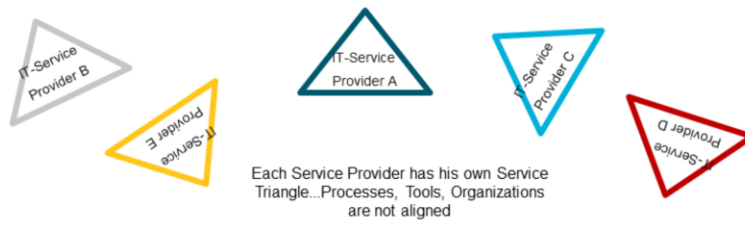


Services Integration - What do I need ?

When providing a basic service, I need:



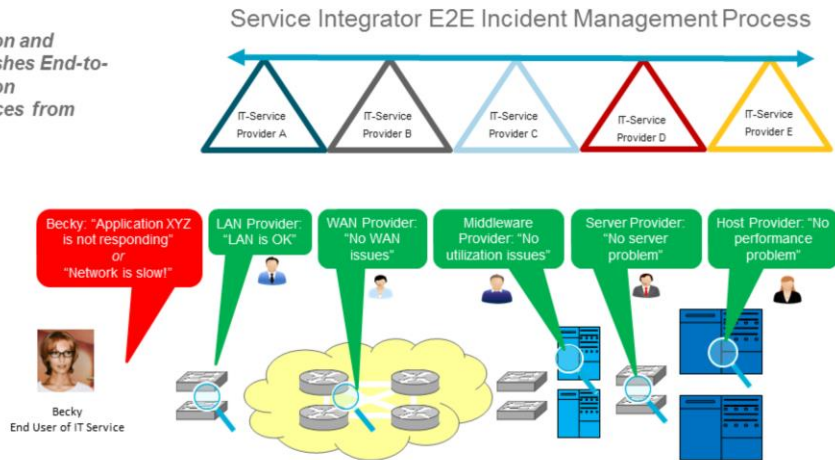
When providing services in a Multi-Sourcing / Hybrid Cloud environment, I'm stuck with:



Services Integration - What is the key ?

Alignment of Processes: The different Providers align or connect their processes E2E as defined by the Service Integrator

"IT Service Integration and Management establishes End-to-End services based on independent IT services from various sources"



Service Integration and Management (SIAM) is an approach to managing multiple suppliers of services and integrating them to provide a single business-facing IT organization.

Services Integration - What method should I use ?

SIAM Approach: Consider and define integration standards in six dimensions to create a Multi Sourcing Ecosystem

PROCESS

Define E2E Processes and Process Interfaces

TOOLS

Define Service Integrator Toolset/ Integration Layer

ORGANISATION

Define Organizational Structure and Responsibilities

INFORMATION

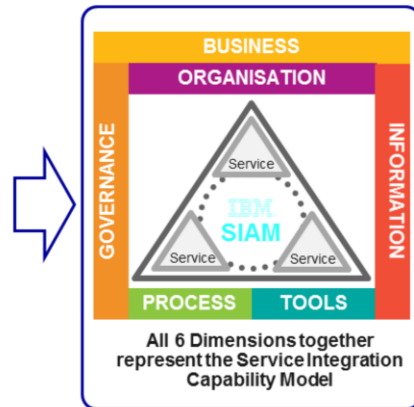
Define Information Standards like e.g a CDM

GOVERNANCE

Define a Governance Structure

BUSINESS

Define Demand/Supply Structure with the Business



Service Providers either comply to the Ecosystem Standards or interface to them. Cloud Services are represented by the CSB.

The SIAM framework covers the 6 major dimensions of Service Integration and Management. It sets out different levels of maturity for the service integration function and the corresponding capabilities required. It provides a structure to understand capabilities needed and to plan their development, implementation and continuous improvement.

1. Process: The set of common processes that define the interactions among the Client Agents in the ecosystem.

In any Multi-Sourcing Ecosystem, the need for clearly defined interfaces is critically important.

Two key aspects to consider are:

- ☐ The interfaces between different processes
- ☐ Process interfaces are the items of information which relate different processes;
- ☐ Typically they are defined as inputs, outputs or controls within each individual process definition document; and
- ☐ It is also of high value to illustrate such interfaces in an overall “process context diagram”.
- ☐ Organizational interfaces:
- ☐ Organizational interfaces indicate who is responsible for doing what;

and

☐ Typically they are defined as process-specific roles, each with a list of associated responsibilities.

2. Tooling: The tools, which support the execution of the operating model.

The SIAM Tools Domain has three major components:

☐ A SIAM ITSM toolset;

☐ An Integration Layer to enable integration to the ITSM Toolsets of the different Client Agents; and

☐ A SIAM Reporting Engine and Dashboard.

3. Organization: The structures, enablers and behaviors that are put in place so that each Client Agent knows its contribution and is properly equipped to deliver it.

A key enabler for the alignment of the SIAM and the Client Agents is the Operational Level Agreement, which is described in more detail later.

4. Governance: The definition of the decision-making and control structure in the ecosystem.

The governance model is based on the agreed principles of vested sourcing: Customer will retain overall control and gain relationship, technology innovation and cost advantages through Customer's and Supplier's joint organizational and governance approach.

The proper governance model includes:

☐ A clearly articulated decision framework on how and by whom decisions will be made and clear responsibility for executing against decisions; and

☐ A shared vision for the type of relationship the parties aspire to have and how they will manage the relationship.

Next to this governance model which will be implemented between Supplier and Customer we will also respect the existing outsourcing governance commitments, which are in place for the external business contracts. We will review these commitments and optimize where possible, without jeopardizing the existing relationships.

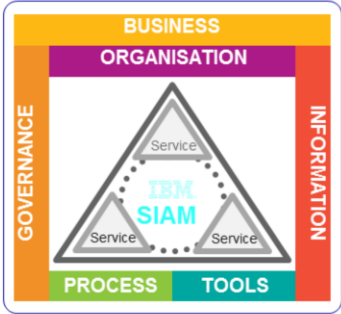
5. Information: The collection of data with regard to measuring service quality and process performance that is needed to control and report on the performance of the ecosystem.

6. Business: Positioning Service Integration as a 'business within a business' aligns business demand with the service catalog and capacity.

This capability defines the way the service delivery is structured. In what way demand for service is captured and how the scope of service delivery is divided between Customer's retained groups, SIAM and the Client Agents.

The SIAM Framework defines a method and provides reusable assets to design and operate a Multi Sourcing Ecosystem

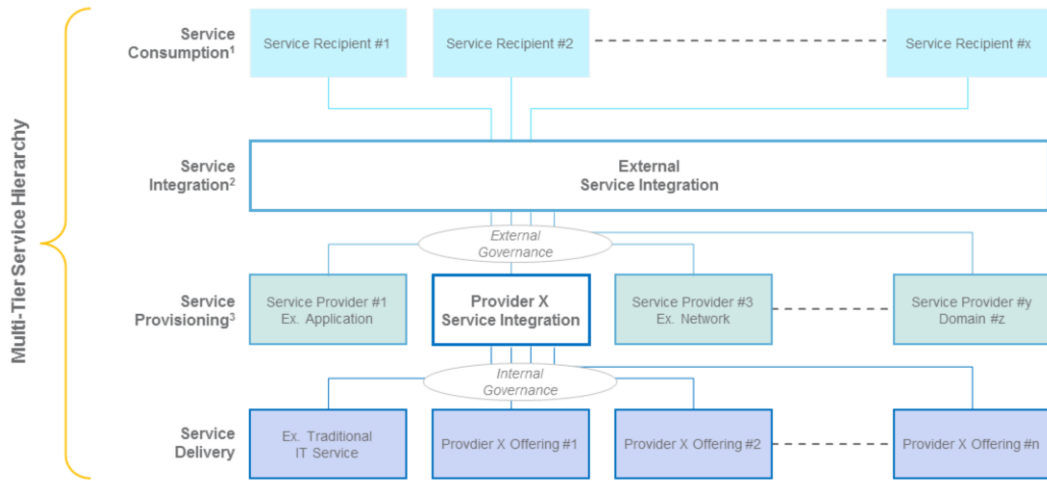
SIAM Framework



SIAM Ecosystems

The 'owner' of the Ecosystem defines standards in the six dimensions and the participants of the Ecosystem either comply to the Ecosystem standards or interface to them.

Services Integration and Management - What does it look like when implemented ?



¹Service Recipients will likely be a mix of the client's Lines of Business, retained IT, and may also include customers of the client

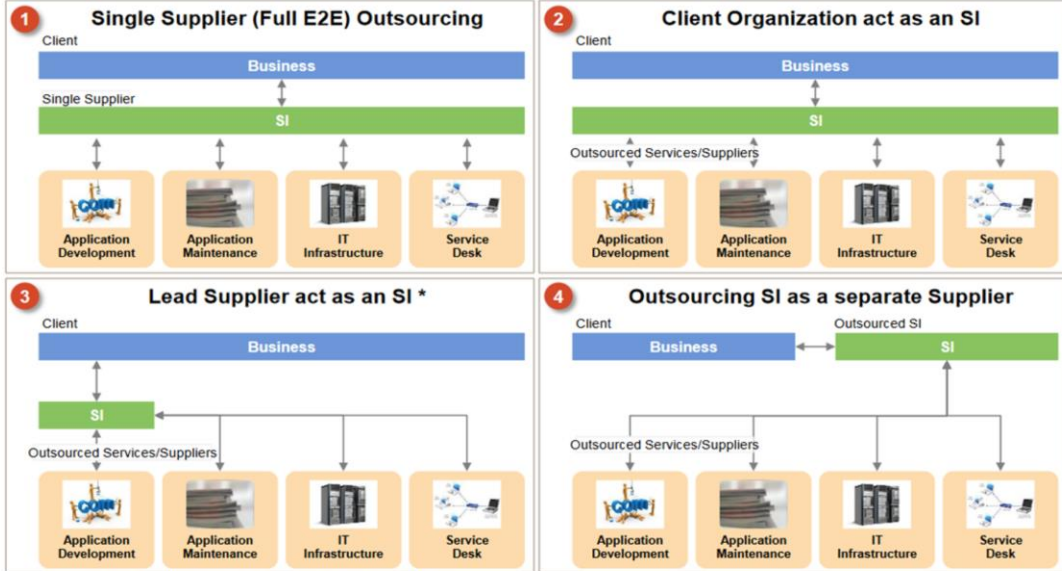
² External Service Integration can either be performed by the Client Retained IT Department, one of Service Providers or by a 3rd party Service Integrator

³Service Providers can be internal or external to the client enterprise



Service Integration and Management

Understanding SIAM Models – Who Can be SI



Is ITIL still the “best” available ITSM framework with the rise of Agile, Dev-Ops etc. adoption?

ITIL and ITSM still are best codifications of the business processes that underpin IT Operations, and actually describe many of the capabilities needed in order for to support a work stream.

ITSM/ITIL shouldn't be pigeonholed as an administrative burden, but rather used in an agile way. ITIL in particular isn't perfect and needs a more modern veneer -- but the core practices are sound and proven.

Let's be clear: ITIL is important. Around two million people have been trained in it, and as the closest thing to an industry standard for IT management that currently exists, it has global reach. Lots of people *read* the ITIL volumes as guidance to their IT organizations. Throughout all its versions, ITIL has been framed as a complete approach to managing the IT function, with the specific exceptions of project methodology and systems architecture. Plus, it's worth noting that ITIL also informs the product directions of vendors selling IT management tools; in fact, they often market their IT service management tools as “supporting” the ITIL processes.

The Future - DevOps

DevOps = Development & Operations

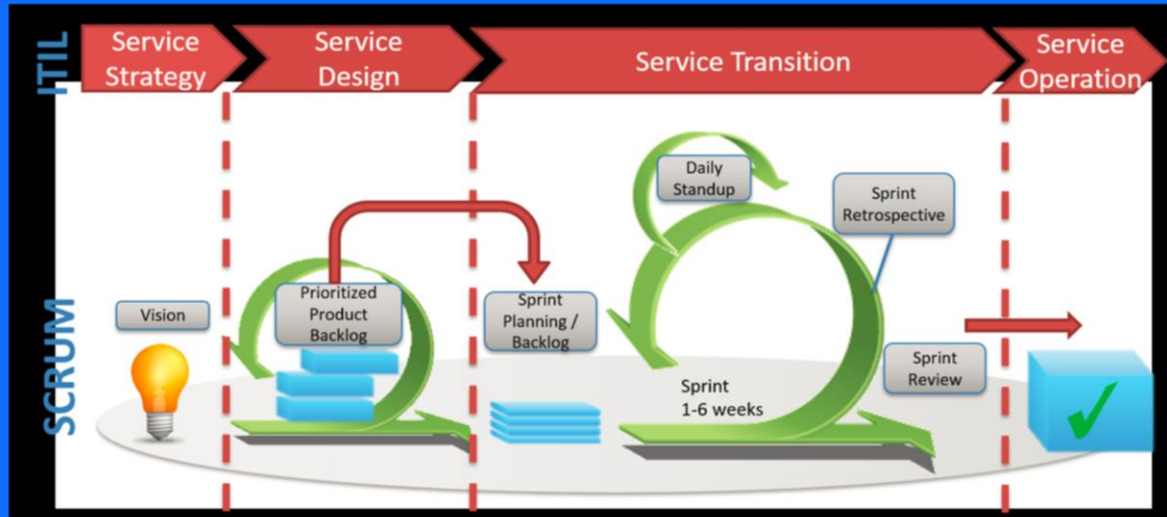
- We used to say “Integrating ITSM into the SDLC”
- Faster time to value removes the middleman
- Continuous release, new platforms in minutes

Legacy Ops Processes “a problem”

- The structure of IT process must change
- The approach to RACI for process must change
- Consistent process must remain (that means ITIL)

ITSM should change – control must devolve & processes must automate

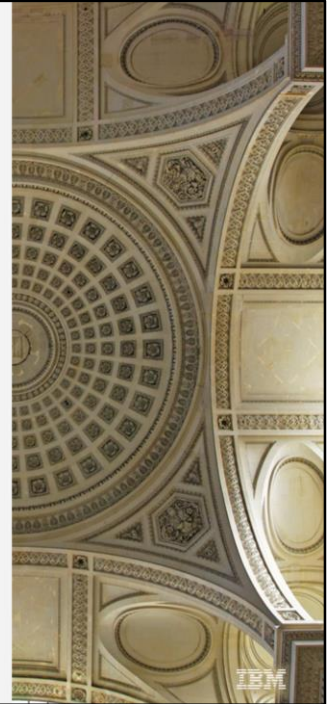
Integrating Agile and ITSM



Summary

- Cloud changes everything and you can't avoid it so get behind it
- Use ITIL/ITSM to offer mentoring on how to choose and manage services wisely
- IT doesn't go away with cloud just its role changes
- ITSM/ITIL are critical to success with cloud
- New SIAM architecture is the way to manage successfully large IT infra
- DevOps is the angle into conversation
- Agile everywhere as approach not as must

IBM Services



- ITSM is still seen by many as purely ITIL-focused or relevant only to internal IT operations.

- ITSM needs to grow up. In the past this has been too narrowly focussed on internal IT functions, projects and costs.

- ITIL has been the 'de facto' training and development approach for the last 10 to 15 years, yet those involved in delivering it know that ITIL is not enough – success requires much more than knowledge of a process framework. In reality ITIL currently offers little in terms of practical guidance around successful 'implementation'. IT and ITSM also need to be viewed and appreciated more in a business broker role, more able to react quickly and be a solution provider rather than a 'blocker' - or the guys who always say 'no'. Without a significant change in speed of delivery, quality and perception of service and demonstrable value, many IT internal departments and external IT companies will become more and more exposed as obsolete and, ultimately, redundant. The ITSM industry itself also needs a make-over, with fresh and accessible content, some new and contemporary framing and messaging, in order to remain attractive and relevant.

- There is a large gap in the body of knowledge around ITSM – ITIL is primarily focussed on process, whereas successful ITSM requires a much wider portfolio of skills and capabilities. ITIL does not define organisational change, human interaction or customer experience, all essential for success. Many organisations have expected

ITIL to deliver results way beyond its capability or remit, seeing ITIL itself as the solution and ignoring these other factors. The result has been a lot of failed or incomplete 'ITIL projects' – these have burned cash and resources with few positive results, leaving the brand names associated with ITIL and ITSM damaged. Without a central body to manage these issues, each area of the industry has continued unilaterally to deliver point solutions with limited success and restricted commercial penetration. ITSM is therefore not a properly codified discipline. In its current form it will not be sustainable, and the industry needs a new and wider definition, vision and structure. This should include, for example, a broader definition and portfolio of skills and capabilities, body of knowledge, and organisational standards, plus clear career development paths, higher education qualifications and a code of conduct. ITSM needs to be clearly positioned and presented as a business approach both within and beyond IT organisations. This is a growth area as many organisations are now using ITSM processes and tools to deliver wider collaboration and work management functions. C-level value propositions must be universally promoted around ITSM as an enabler, broker, orchestrator, rather than administrator. All stakeholders need to engage and play their part in the delivery of Service Management - it's a team game. We need to move away from thinking that ITSM is 'just what the Service Desk do.' In other words, in order to survive, the IT and ITSM industry has to move to the next level of maturity - we collectively need to grow up.

